Chronology of Events Leading to the Recommendation
on the ASCII

1. History of the ASCII Development.

The American Standards Association Sectional Committee X3 on
Computers and Information Processing was formed in 1960. Sub-
Committee X3.2 on Codes and Input/Output began to function in
the fall of 1962 attacking first the problem of a standard coded
character set. The first output product of this work was the
American Standard Code for Information Interchange (ASCII) ASA
X3.4-1963 which was approved after considerable controversy as
an American Standard in June of 1963. The coded character set
was not complete in that there was a section of codes to which
no characters were assigned pending further research on character
requirement. Following some two years of further research and
international deliberations, a revision of the ASCII was approved
by the ASA in December 1965. This revision assigned characters
to all 128 positions in the code table and included some changes
in characters and character positions in the interest of com-
patibility with the International Organization for Standardization
(ISO) 7-Bit Code and the CCITT proposed 7-Bit new Alphabet-Code
(Note. As a result of a joint ISO/TC 97/SC2 and CCITT/GM
Alphabet meeting in Paris in April 1966, further minor changes
were made in the ISO and CCITT to bring them into complete
agreement. These same changes to the ASCII are now being
processed on an expedited basis. The results should be known
and the action completed in the next few months.) The ISO 7-Bit
Code appears to have the support of all the national bodies par-
ticipating in the ISO/TC97 project. The European Computer
Manufacturers Association (ECMA) has adopted this code as an ECMA
standard. A number of the participating national bodies have
either incorporated the code in national standards or have such
action underway. This is the ASCII in the United States. The
U.S. Department of Defense introduced consideration of the ISO
7-Bit Code into the NATO where it is being considered for adoption
as a NATO standard. The ASCII has been adopted as a MILITARY
STANDARD (MIL-STD - 188B) for communication systems and as a JCS
standard for Information Interchange in the National Military
Command and Control System. The U.S. Air Transport Association
and the International Air Transport Association, acting jointly
in developing plans for digital air-ground communications, have
adopted the ISO 7-Bit Code as an ATA-IATA standard for communications.
The above are examples of the great interest shown by many users
organizations as well as equipment suppliers in achieving inter-
national code compatability. From an implementation standpoint,

the ASCII will be the code used in the worldwide DOD AUTODIN
general purpose communication system and is now the code used in
the Advanced Record System under lease by the General Services
Administration. The ATA-IATA have established a committee to
develop implementing plans for converting to the 7-Bit Code
from the presently used 5-Bit Baudot code. It is against this
general background that the adoption of ASCII as a Federal
Standard has been considered,

2. The Standards Panel of the BOB ADP Advisory Council meeting on
January 25, 1965, agreed to a statement on the adoption of the
ASCII by the Federal Government and recommended that the statement
be issued as a policy announcement.

3. The Director of the Bureau of the Budget, in a letter of
September 28, 1965, requested the views of the Secretary of
Commerce on whether the ASCII should be adopted as a Federal
Standard. A similar letter was sent to the Administrator of
General Services on the same date.

4. A joint Secretary of Commerce-Administrator of GSA letter was sent
under date of November 1, 1965, to ADP and communications equipment
suppliers enclosing the recommendations of the Standards Panel and
requesting a written response commenting on the economic impact
of the proposed policy statement and an indication of the earliest
date when equipment responsive to the proposed policy would be
available. The responses of the suppliers generally supported
the proposed standardization policy and objectives. A number
indicated that they were either in a position to supply ASCII
equipment or were developing products based on the ASCII. Some
indicated that fiscal year 1967 was too early to include ASCII
in procurement specifications. The written responses, particularly
from computer manufacturers, were not sufficiently definitive to
determine when a full range of ASCII equipment would be available.

5. The views of the using departments of the Federal Government were
also solicited in a joint Commerce/GSA letter carrying the same
date of November 1, 1965. Responses of the departments and inde-
pendent offices indicated very strong support for the proposed
policy on standards as well as support for the adoption of
ASCII as a Federal Standard. Some of the responses, however, in-
dicated a misunderstanding that the proposed action would
require conversion of existing installed systems to ASCII.

6. A collective meeting of NBS, GSA, and other Federal department
and independent office representatives was held on February 15, 1966.
The purpose of this meeting was to clear up any questions on the
Standards Panel's statement on ASCII, to bring out any major
problems or objections with respect to the adoption of ASCII and
to make clear the areas of application. This meeting confirmed
the strong support within the Federal Government for ADP standards
in general and for the ASCII in particular. A total of 45
representatives attended this meeting representing 31 Federal
departments and independent offices.

7. Two days of collective meetings were held on March 7 and 8, 1966, between NBS and GSA representatives on one hand and ADP and communication equipment suppliers on the other. The primary purpose of these meetings were to clear up any misunderstandings on the proposed areas of application under consideration for ASCII and to obtain the suppliers views on when ASCII should be made a requirement in Government ADP and communication equipment procurement actions. Manufacturers indicated a preference for private meetings with NBS-GSA representatives to discuss availability of ASCII equipment. Private meetings were, therefore, scheduled with the following suppliers:

Company	Meeting Date
Litton Industries (MONROE)	March 1, 1966
Honeywell, Incorporated	March 31, 1966
Philco Corporation	April 15, 1966
Burroughs Corporation	April 19, 1966
RCA	April 19, 1966
Control Data Corporation	April 20, 1966
UNIVAC, Div. Sperry Rand Corp.	April 21, 1966
DURA Corporation	April 22, 1966
Digitronics Corporation	May 3, 1966
IBM Corporation	May 20, 1966

8. The NCR Company responded with a letter having concluded no private meeting was necessary. The General Electric Company representatives have also stated that a letter will be forwarded but it has not been received. A number of other companies have indicated no private meeting was necessary or desired.

9. Records of the correspondence noted above, and reports of meetings held and notes taken at the meetings, are retained in the files at the Center for Computer Sciences and Technology, National Bureau of Standards.

13 Sept 1966

(For Advance Information of the Interagency Committee on ADP)

Tentative Outline of Report of Accomplishments

in the Management of

Automatic Data Processing

1. <u>Requirement</u>: President's memo of June 28, 1966 requires the Director, Bureau of the Budget to report to him to December 31, 1966 and every six months thereafter on progress being made to improve the management of ADP.

2. <u>Plans for Implementation</u>: BOB circular will call for submission of agency reports to meet the President's requirement. Initial report would be due in BOB on November 25, 1966 to cover agency accomplishments from March 1965 to November 1966. Subsequent reports would be due on May 25 and November 25 to cover previous six months.

3. <u>Probable Report Outline</u>: Consideration is being given to having agency reports consist of 5 sections:

A. Accomplishments in the <u>Use</u> of electronic digital computers (would apply to computer systems installed or reviewed during report period).

    1. Brief description of the program in which computers

       are used.

    2. Benefits being obtained.

    3. The role of the computer in obtaining benefits.

B. Accomplishments in the <u>management</u> of ADP activities.

    1. Action taken by agencies in response to following recommendations

       in Report to the President on the Management of ADP in the

       Federal Government dated March 2, 1965.

       a. Chapter 2, Recommendation 3

       b. Chapter 5, Recommendation 2

    2. Other actions, su. as standardization of computer-based systems, consolidation of computer facilities, use of excess equipment.

C. Plans for the future

    1. Plans for the use of computers

    2. Plans for the management of ADP activities

D. Areas in which management improvement of ADP requires action on the part of other agencies.

E. Description of ADP organizational framework and assignment of responsibilities thru which the agency head is assured that ADP is properly managed.